

REMARKS

In view of the following remarks, the Examiner is requested to allow Claims 1-10 and 12-16, as well as newly presented Claims 36 - 42, the only claims under examination in this application.

Claims 1, 12, 15 and 16 have been amended by clarifying the claim language. New Claims 36 to 39 find support in paragraph 107 on page 29 of the specification. New Claims 40 to 42 find support in paragraph 98 of page 27 of the specification. Accordingly, no new matter has been added.

As no new matter has been added by way of these amendments, the entry thereof is respectfully requested.

Claim Rejections – 35 U.S.C. § 102

Claims 1-10 and 12-16 remain rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by Albitar et al. (Molecular Diagnosis, 1997).

The rejected claims are directed to a method of producing a biopolymeric array. The method includes immobilizing a population of a number of copies of a probe for a target to a surface of a solid support. Elements of the claimed method include:

determining an anticipated abundance of a target in a sample for which said array is designed to assay;

identifying a number of copies of a first probe for said first target, wherein said identified number of copies is dependent on said determined anticipated abundance.

The Office asserts that Albitar teaches this method and points to page 172, column 2, in support of this assertion. Specifically, the Office states that "Albitar places the probes in anticipation of the abundance of target." The Applicants

respectfully disagree and contend that Albitar does not teach a method that includes the steps of:

determining an anticipated abundance of a target in a sample for which said array is designed to assay;

identifying a number of copies of a first probe for said first target, wherein said identified number of copies is dependent on said determined anticipated abundance.

What Albitar actually teaches at page 172, column 2, is the following:

Simplified RDB Assay

Previous reports have suggested that oligonucleotides with longer dT tails were more efficiently fixed to nylon membrane [21]. Using nitrocellulose membrane, we tested the efficiency of using 20-base oligonucleotides without dT tails. As shown in Figure 1, on hybridization to a ³²P-end-labeled PCR product, an adequate signal can be detected on overnight exposure using 15 pmol of the oligonucleotide. This signal appears linear with the amount of oligonucleotide attached to the membrane, as shown using 15, 75, and 375 pmol. Mutant and wild-type oligonucleotides for codons 12 and 13 were blotted on one strip, and those for codon 61 were blotted on a separate strip (Fig. 2) for each of the *N-ras*, *H-ras*, and *K-ras* oncogenes, yielding six total strips.

As can be seen with reference to the above passage, although Albitar discloses that 15, 75 and 375 pmols of oligonucleotide probes are attached to a nylon membrane, there is no teaching within Albitar that these amounts are in any way related to the expected abundance of target in the sample. Rather, with respect to the sample, Albitar simply discloses that:

Peripheral blood samples from 3 normal individuals, bone marrow samples from 2 normal individuals, and bone marrow samples from 16 patients with CMML were tested for *ras* gene mutations. Figure 2 shows representative samples of RDB assays showing mutations. Four cell lines (HS578, MDA-MB231, PA1, and HL60) with known *ras* mutations were used as positive controls and showed the expected mutations: A→T in codon 61 of N-*ras* in HL60, G→A in codon 12 of H-*ras* in HS578T, G→A in codon 13 of K-*ras* in MB231, and G→A in codon 12 of N-*ras* in PA1 (data not shown). No mutation was detected in any of the samples from normal individuals. Five mutations were detected in the 16 (31%) samples from CMML patients (Table 1). The mutations were in the N- and K-*ras* oncogenes. No mutations were detected in the H-*ras* oncogene.

At no point in time does Albitar teach a method that includes the steps of:
determining an anticipated abundance of a target in a sample for which said array is designed to assay;
identifying a number of copies of a first probe for said first target, wherein said identified number of copies is dependent on said determined anticipated abundance.

Hence, the Applicants contend that Albitar is deficient in that it fails to teach all the elements of the rejected claims. The Applicants respectfully request that the 35 U.S.C. § 102(b) rejection of Claims 1-10 and 12-16 be withdrawn:

New Claims 36 to 42 are patentable for at least the reasons provided above.

CONCLUSION

Applicants submit that all of the claims are in condition for allowance, which action is requested. If the Examiner finds that a telephone conference would expedite the prosecution of this application, please telephone Bret Field at (650) 833-7770.

The Commissioner is hereby authorized to charge any underpayment of fees associated with this communication, including any necessary fees for extensions of time, or credit any overpayment to Deposit Account No. 50-1078, order number 10031014-1.

Respectfully submitted,

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